

What is claimed is:

1. A control method for a storage control apparatus comprising:
a plurality of channel control units connected to communicate with each other and which receive a data input and data output requests to be transmitted from an information processing device, and output a control signal to control writing and reading of data to a storage device in accordance with the data input/output request; and
a disk control unit which carries out the writing and reading of data to the storage device in accordance with the control signal,
wherein a first channel control unit monitors an operation of the information processing device by communicating with the information processing device; and
the first channel control unit, upon detection of a problem in the information processing device, carries out processing for restricting processing to be carried out in accordance with the data input/output request by a second channel control unit to which the data input/output transmitted from the information processing device is arrived.
2. The control method of Claim 1 wherein the processing for restricting processing to be carried out in response to the data input and output request comprises, having received the data input and output request transmitted from the information processing device in which the problem was detected, processing for controlling not to output the control signal to be outputted in accordance with the data input and output request.
3. The control method of Claim 1 wherein the first channel control unit transmits a heartbeat signal between the channel control unit and the information processing device, and detects that a problem occurred in the information processing device by a fact that the heartbeat signal was disrupted.
4. The control method of Claim 1 wherein the first channel control unit includes a function for accepting a data input and output request with file designation as the data input and output request to be transmitted from the information processing device, and the second channel control unit has a function for accepting a data input and output request with block designation as the data input and output request to be transmitted from the information processing device.
5. The control method of Claim 1 wherein the monitoring of the operation of the information processing device to be carried out by communicating with the

information processing device is provided by a function of cluster software in the first channel control unit.

6. The control method as in Claim 1 wherein the first channel control unit includes an interface to be connected to LAN, and the second channel control unit includes an interface to be connected to SAN.

7. A storage control apparatus comprising:

a plurality of channel control unit which are connected in such a manner that they can communicate with each other and which receive a data input and output request to be transmitted from an information processing device and output a control signal to control write-in and read-out of data to a storage device in accordance with the data input and output request;

a disk control unit which carries out the write-in and read-out of data to the storage device in accordance with the control signal;

a unit which monitors an operation of the information processing device by an activity that a first channel control unit communicates with the information processing device;

a unit which carries out processing for restricting processing to be carried out in response to the data input and output request by a second channel control part to which the data input and output request transmitted from the information processing device is arrived, in case that the first channel control unit detects a trouble in the information processing device.

8. The storage apparatus as in Claim 7 wherein the first channel unit includes a function for accepting a data input and output request with file designation as the data input and output request being transmitted from the information processing device; and the second channel unit includes a function for accepting a data input and output request with block designation as the data input and output request being transmitted from the information processing device.

9. A control method for a storage control apparatus including a plurality of channel control unit connected to communicate with each other and which receive a data input and output request to be transmitted from an information processing device and output a control signal to control write-in and read-out of data to a storage device in accordance with

the data input and output request, a disk control unit for write-in and read-out of data to the storage device in accordance with the control signal, and a shared memory accessible from each channel control unit, the method comprising:

- a first channel control unit monitoring an operation of the information processing device by communicating with the information processing device;

- the first channel control unit, when it detects a problem in the information processing device, storing an identifier by which the information processing device can be identified in the shared memory;

- a second channel control unit obtaining the identifier by accessing to the shared memory; and

- the second channel control unit, having received the data input and output request transmitted from the information processing device having the identifier obtained, carries out processing for restricting processing to be carried out in response to the data input and output request.

10. A control method of a storage control apparatus comprising:

- a plurality of channel control unit which are connected in such a manner that they can communicate with each other and which receive a data input and output request to be transmitted from an information processing device and output a control signal to control write-in and read-out of data to a storage device in accordance with the data input and output request;

- a disk control unit which carries out the write-in and read-out of data to the storage device in accordance with the control signal; and

- a shared memory which can be accessed from each channel control unit, wherein a first channel control unit monitors an operation of the information processing device by communicating with the information processing device;

- the first channel control unit, when it detected a problem in the information processing device, stores an identifier by which the information processing device can be identified in the shared memory and notifies to a second channel control unit of a fact that the problem has occurred;

- the second channel control unit obtains the identifier by accessing to the shared memory in response to reception of the notification at appropriate timing; and

- the second channel control unit, having received the data input and output request transmitted from the information processing device having the identifier obtained,

carries out processing for restricting processing to be carried out in response to the data input and output request.

11. A control method of a storage control apparatus including: a plurality of channel control units which are connected in such a manner that they can communicate with each other and which receive a data input and output request to be transmitted from an information processing device and output a control signal to control write-in and read-out of data to a storage device in accordance with the data input and output request; and a disk control unit which carries out the write-in and read-out of data to the storage device in accordance with the control signal, the method comprising:

transmitting file management information to the information processing device in accordance with the request being transmitted from the information processing device;

receiving the data input and output request generated on the basis of the file management information being transmitted from the information processing device, and carrying out the write-in and read-out responsive to this to the storage device;

monitoring an operation of the information processing device by communication of the first channel control unit with the information processing device; and

carrying out processing by the first channel control unit for restricting processing to be carried out in response to the data input and output request by a second channel control unit to which the data input and output request transmitted from the information processing device is arrived, in case that the first channel control unit detected a trouble in the information processing device.